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AUTHOR Hawkins, Andrew H.; And Others
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ABSTRACT

This study sought to establish a descriptive base for the teaching performances of physical education trainees as they progress through a teacher education program. A behavioral teacher evaluation system was developed which includes 11 teacher response classes and 8 student response classes. The project training course included four courses which involved some form of field-based practica (peer teaching, micro teaching, student teaching, etc.). Approximately 12 observations were conducted on each trainee, usually over the course of four semesters. Certain student and teacher response classes were selected for analysis based on presumed relationships to teaching effectiveness. These response classes were graphed for each trainee over the course of their teacher education program, and patterns of responses correlating with course, practica type, accountability system, class size and activity were noted. Individual subject graphs revealing certain prototypic response patterns displayed possible relationships among accountability system, class size, activity, and several key dependent measures including motor engaged time, feedback rate, sequence of instructional behaviors, and specific observation. (JD)

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TEACHING PERFORMANCE OF UNDERGADUATE PHYSICAL EDUCATION MAJORS ACROSS TEACHER EDUCATION PROGRAM PRACTICA

Andrew H. Hawkins
Robert L. Wiegand
Lisa Griffin

West Virginia University

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TEACHING PERFORMANCE OF UNDERGRADUATE PHYSICAL EDUCATION MAJORS ACROSS TEACHER EDUCATION PROGRAM PRACTICA. Andrew H. Hawkins, Robert L. Wiegand and Lisa Griffin, West Virginia University.

The purpose of this study was to establish a descriptive base for the teaching performances of trainees as they progress through a teacher education program. In conjunction with a personnel preparation project funded by the U.S. Office of Special Education, a behavioral teacher evaluation system was developed which includes eleven teacher response classes and eight student response classes (the eight learner involvement categories of ALT-PE). Category system data were collected electronically using a microprocessor (Datamyte 801). A project training course sequence was established including four courses which involved some form of field based practica (peer teaching, micro teaching, student teaching, etc.). All undergraduate teacher certification majors in physical education who completed the project training sequence during the project's three year duration served as subjects (N=55). All subjects were evaluated during each practica at least twice, and usually three or more times. Approximately twelve observations were thus conducted on each trainee over the course of usually four semesters. Teacher education faculty and doctoral and masters level graduate assistants associated with the project served as data collectors. All were trained to a minimum of an 85% interobserver agreement level using training tapes and were retrained yearly. Certain student and teacher response classes were selected for analysis based on presumed relationships to teaching effectiveness. These response classes were graphed for each trainee over the course of their teacher education program, and patterns of responding correlating with course, practica type, accountability system, class size and activity were noted. Individual subject graphs revealing certain prototypic response patterns displayed possible relationships between accountability system, class size, activity, and several key dependent measures including motor engaged time, feedback rate, sequences of instructional behaviors, and specific observation (active supervision). The descriptive information emerging from this study provides a foundation for further investigations of the nature and effects of teacher education programs on teaching performance. In particular, class accountability system, class size of practica, and activity type seem to be promising independent variables for studies which are more experimental in nature as these variables seemed to correlate with certain key dependent measures for certain trainees.

Andrew H. Hawkins
School of Physical Education
West Virginia University
P.O. Box 6116
Morgantown, WV 26506-6116

304 293-4542

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With the recent literature related to teacher behaviors in movement classes teachers have been introduced to specific response classes that have been consistently exhibited in the workplace. Various stable response classes have been identified by researchers: Rink (1983) and Schempp (1984) labeled "management" and "teacher direction giving" respectively as stable. Lombardo (1982) and Lombardo and Cheffers (1983) identified "teacher information giving / lecture" as stable. Rink (1983) also identified "feedback" as a stable response class in the workplace.

Where do teachers in the workplace learn the response patterns that have become a consistent part of their teaching? Lawson (1986) states that a physical education recruit's biography (i.e., beliefs about physical education prior to teacher education programs), was

more instrumental than teacher education programs in affecting his/her orientations and actions as a teacher.

Thus, it seems that certain teacher response classes are exhibited consistently in the workplace but that certain actions/beliefs may already be established before a recruit enters a teacher education program. Therefore, it is important to examine the inner workings of teacher education programs to find out the degree to which programs influence patterns of conduct which appear consistent in the workplace.

This study described and graphically analyzed several variables of teacher behavior displayed by graduates of a teacher education program as they participated in an extensive series of practica conducted over a 3 year period. Response classes analyzed were those that have revealed some tendency toward stabi-

lity in the workplace. The purpose was therefore to determine if these response classes also tend toward stability during teacher education programs or if they were influenced by various aspects of the program (e.g., accountability system of courses, etc.).

SUBJECTS

Data collected between 1982-1985 on 59 physical education graduates of the teacher certification program at West Virginia University were descriptively analyzed. The data from 22 of those graduates who have been observed at least nine times across at least three instructional settings were selected for graphic analysis.

INSTRUMENTATION

A measurement system including a comprehensive teacher behavior category system with eleven response classes (Hawkins, Wiegand and Bahneman, 1983) and another comprehensive student behavior category system comprised of eight learner involvement response classes from the ALT-PE system (Siedentop, Tousignant

and Parker, 1982) were utilized for the data collection.

The data were collected using an electronic microprocessor that allows for the continuous recording of behaviors and the collection of both frequency and duration data by human observers. The data collectors were trained in the use of the observation instrument. An accuracy check (by comparison to a video-tape standard) was given at the beginning of each semester and then periodically throughout each semester to ensure that collectors maintained a 85% accuracy rating. The trainees were evaluated with this instrument between seven and 15 times throughout their pedagogical training.

DESIGN AND ANALYSIS

The study utilized a descriptive analytic research design to compare certain teacher response classes (percent of Management (M), Verbal Instruction (VI) and Total Instruction (TI) and rate of VI and Feedback (F)) across different instructional settings. The instructional settings included a series of four semester long practica associated with four courses. The practica varied according to class size, age and characteristics of students, activity, and accountability systems.

This study graphically displayed the data of the selected graduates. Instructional settings were superimposed on the data to determine the degree to which systematic variation appeared as a possible function of various portions of the teacher education program. Of special interest was the relationship between performance-grade exchange accountability systems and trainee teaching performances.

VARIABILITY OF RESPONDING ACROSS PRACTICA

All response classes were marked by highly unstable response patterns. TABLE 1 portrays the high and low ranges for individual trainees on all response classes. Interestingly, the most stable ranges for durations of Management (M), Verbal Instruction (VI) and Total Instruction (TI) were achieved by the same trainee. No other trainee approached these minimal ranges.

FIGURE 1 displays data for all response classes for one trainee and is typical of the highly variable response patterns exhibited by nearly all trainees when graphed across all courses. FIGURE 2 displays the most stable data of any trainee emerging from the investigation. It is important to note that even when relative stability is achieved for M, VI and TI percentages, a substantial degree of variability still exists for rates of VI and

Feedback (F). Generally, however, trainee response patterns generally resembled FIGURE 1 rather than FIGURE 2.

VARIABILITY BETWEEN PRACTICA

Frequently, response patterns appeared to differ between courses or practica. Clear differences in accountability systems exist between these courses particularly in terms of the presence or absence of systems which focus on data based performance and whether or not the systems are formal or informal. FIGURE 3, similar in many respects to a reversal design, depicts generally lower levels of M in classes that employ formal accountability systems focused on data based teaching performance. Somewhat greater stability in M is also evident in formal accountability courses as well.

A similar pattern is evident for several behaviors in FIGURE 4. Management tends to be higher and more variable in classes with no accountability than in those with either formal or informal systems. Furthermore, the rate of F and VI and the percent of TI are higher in formal and informal accountability courses.

Interestingly, accountability systems appeared to enhance stability of one trainee's rate of F without affecting its general level. In FIGURE 5, with the exception of observation 8, rates of F are highly stable in formal accountability courses. In the no accountability class the data are not lower, just more unstable.

FIGURE 6 deviates from this pattern slightly. At first glance TI and VI seem to be related to accountability system. However, the general decline in these variables in Student Teaching is noteworthy and may indi-

cate a number of influences, including a possible dilutioin of an informal accountability system with negative socializing influences from the workplace.

Student Teaching, however, did not seem to consistently cause teaching performace declines and in some cases positive trends were observed. In FIGURE 7 a clear difference in instructional patterns existed in Student Teaching which may be encouraging. In all other practica TI was almost entirely verbal (VI) while the difference between TI and VI in Student Teaching was substantially enlarged. This indicates that a greater proportion of TI during Student Teaching was obtained from the more intense instructional procedures of modeling and physical guidance.

Finally, in FIGURE 8 Student Teaching was seen to have a stabilizing effect on the rate of VI. It should be noted, however, that while stable, the level of the rate of VI is lower than in other classes leaving doubt regarding the relative benefit from this apparent effect.

The data from individual trainees can generally be described as highly variable. The dependent variables, selected for their tendency toward stability in the workplace, revealed little stability across teacher education practica. It therefore does not appear that this teacher education program seems to produce consistently reliable patterns of responding during practica leading to the generalization of those patterns to public school gymnasia.

This conclusion does not mean that no influences of teacher education were detectable in teaching performances during practica. It appears that a number of such influences were indeed at work for some of the trainees. However, the nature of those influences did not appear progressive, i.e., trainees did not seem to produce poor levels of certain teacher response classes and gradually improve them over the entire course of

the program. Rather, the influences appear to work more discriminatively in that trainee performances seemed to be accomodations to certain demand characteristics of specific practica settings. Chief among those characteristics were the types of accountability systems employed.

Stable patterns of responding occasionally appeared during formal accountability classes and during student teaching. Further study on the nature and focus of accountability systems in teacher education programs is thus warranted. It sometimes seemed that practica served as a kind of experimentation period for the trainees who then settled into more consistent and routine patterns of responding during Student Teaching. What is especially clear from this investigation, however, is that no one pattern of responding characterized more than a few trainees. The area is

therefore ripe for investigation as more questions than answers emerged from this descriptive analysis.

Hawkins, A., Wiegand, R. & Bahneman, C. (1983). Data-based evaluation of a physical education professional preparation program. In Templin, T., & Olson, J. (eds.). Teaching in Physical Education, Champaign: Human Kinetics. 131-141.

Lawson, H. (1986). Occupational socialization and the design of teacher education programs. Journal of Teaching in Physical Education, 5, 107-116.

Lombardo, B. (1982). Variability in teaching behavior and interaction in the gym: a two year analysis. In Pieron, M., & Cheffers, J. (eds.). Studying the Teaching in Physical Education. Liege, Belgium: International Association for Physical Education in Higher Education. 93-101.

Lombardo, B., & Cheffers, J. (1983). Variability in teaching behavior and interaction in the gym. Journal of Teaching in Physical Education, 2(2), 33-48.

Rink, J. (1983). The stability of teaching behavior over a unit of instruction. In Templin, T., & Olson, J. (eds.). Teaching in Physical Education, Champaign: Human Kinetics. 318-328.

Schempp, P. (1984). Stability in the gym: a one-year time-series analysis. Paper presented at the AAHPERD National Convention, Anaheim, CA.

Siedentop, D., Tousignant, M., & Parker, M. (1982). Academic Learning Time - Physical Education: Coding Manual. Columbus: School of Health, Physical Education and Recreation, The Ohio State University.

TABLE 1

MINIMUM AND MAXIMUM INDIVIDUAL TRAINEE RANGES

FOR RESPONSE CLASSES

RESPONSE CLASS	MINIMUM RANGE	MAXIMUM RANGE
Management percent (M)	18%	77%
Verbal Instruction percent (VI)	12%	71%
Total Instruction percent (TI)	19%	83%
Verbal Instruction rate (VI)	1.7/min.	5.4/min.
Feedback rate (F)	1.4/min.	12.0/min.

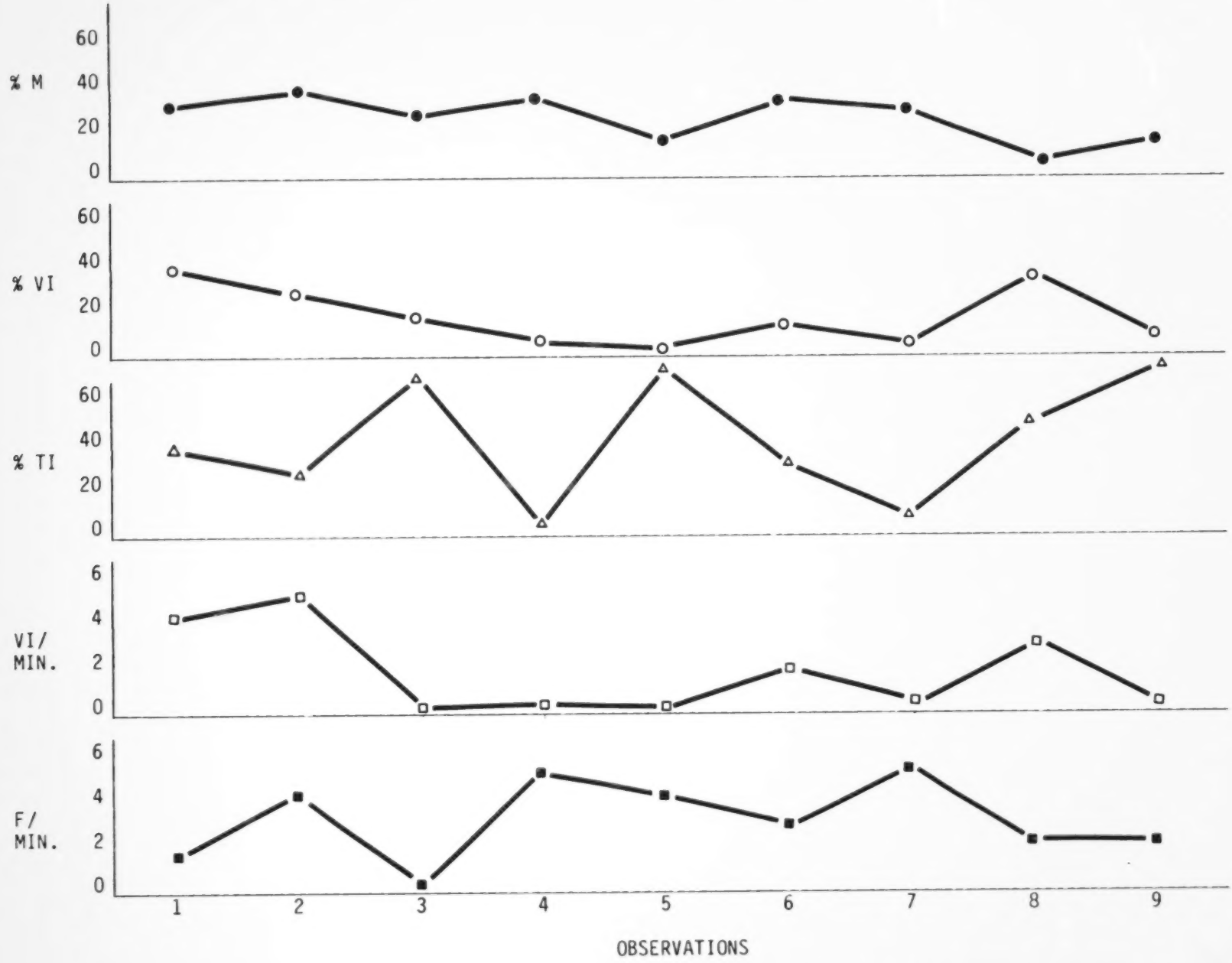

FIGURE 1. Trainee JD. Example of highly variable response patterns in all response classes.
M = Management; VI = Verbal Instruction; TI = Total Instruction.

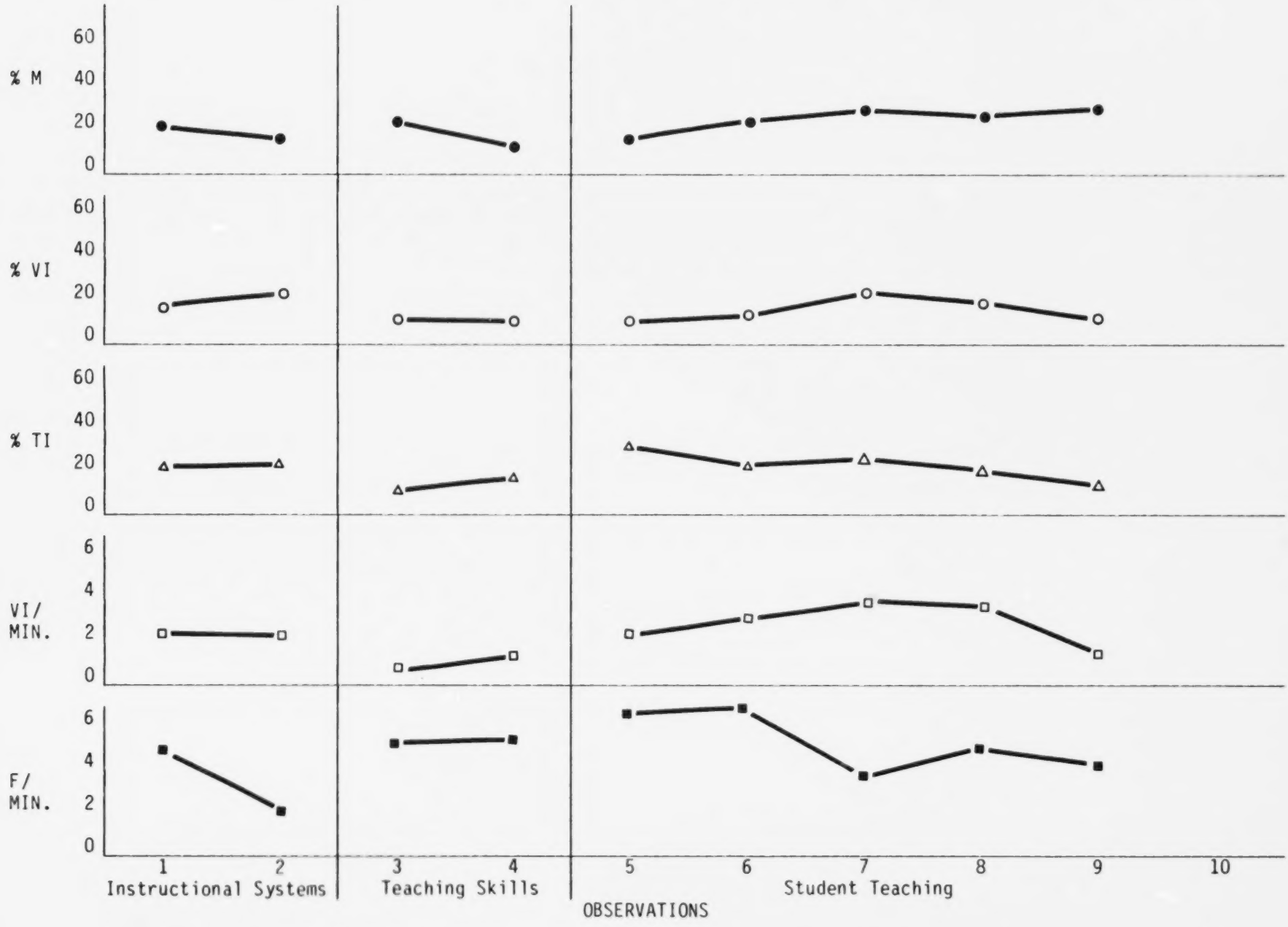

FIGURE 2. Trainee LM. Trainee exhibiting the most stable response patterns.
M = Management; VI = Verbal Instruction; TI = Total Instruction.

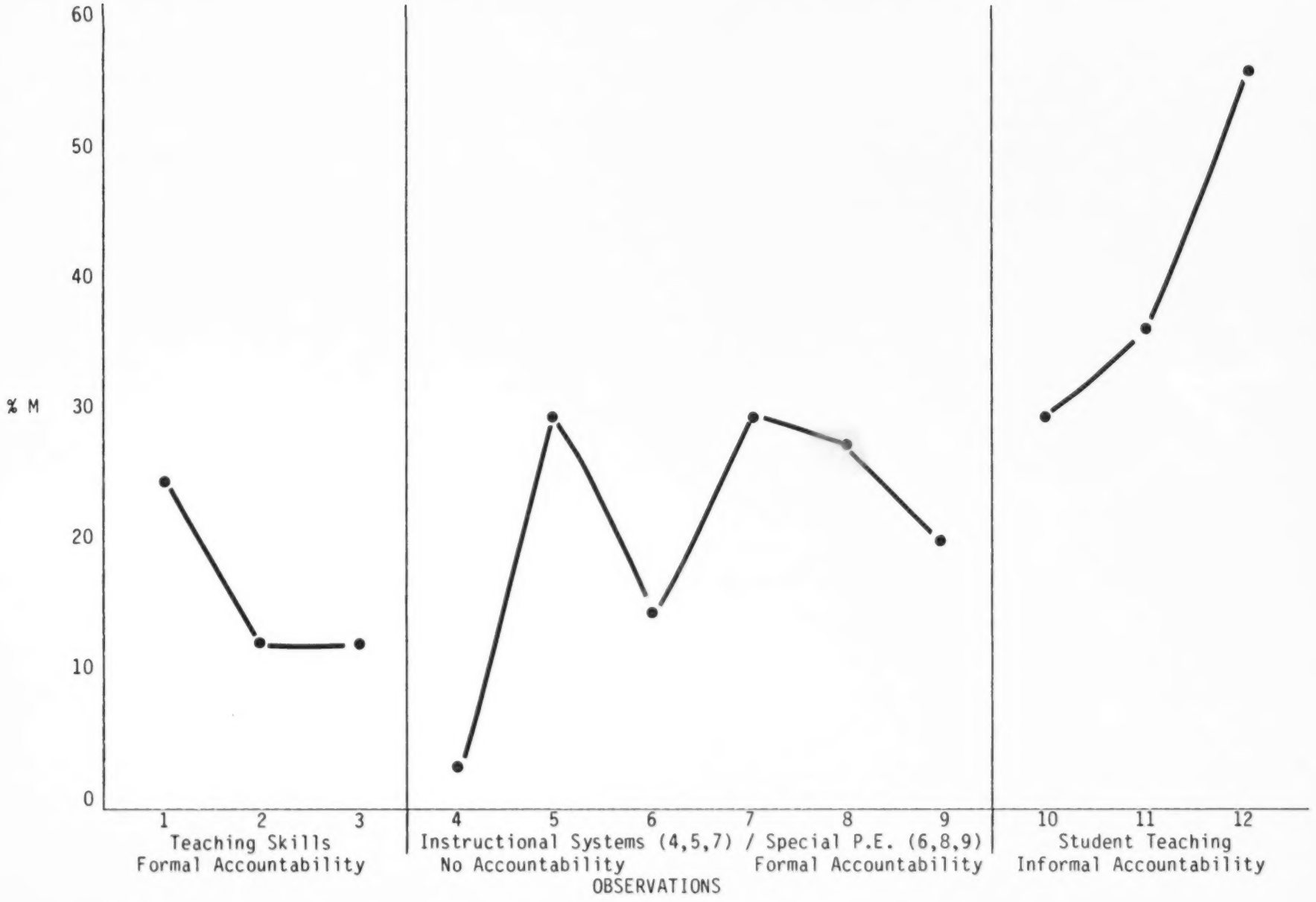

FIGURE 3. Trainee DF. Management (M) as a function of accountability system.

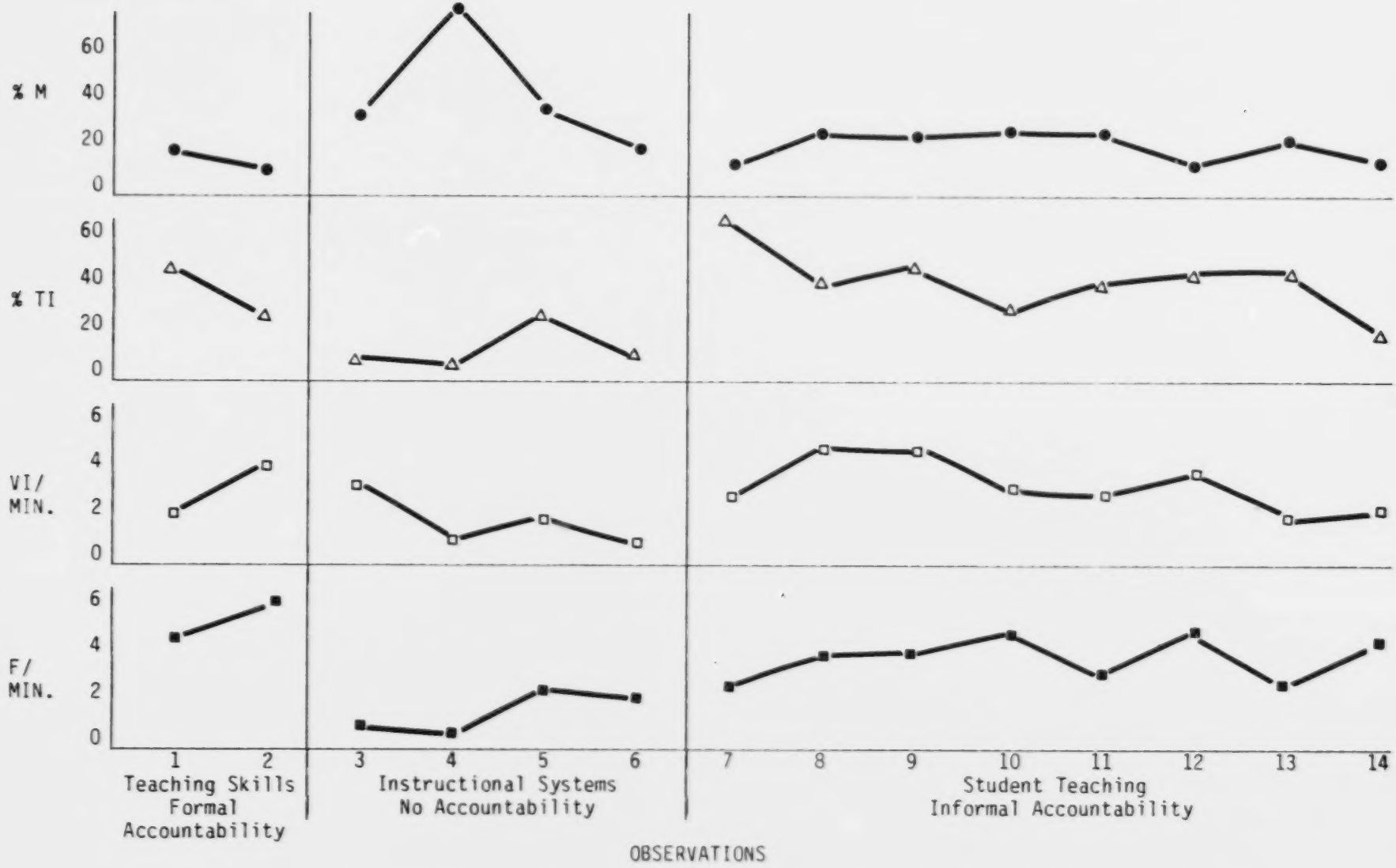

FIGURE 4. Trainee ML. Percent of Management (M) and Total Instruction (TI) and Rate of Feedback (F) and Verbal Instruction (VI) as a function of accountability system.

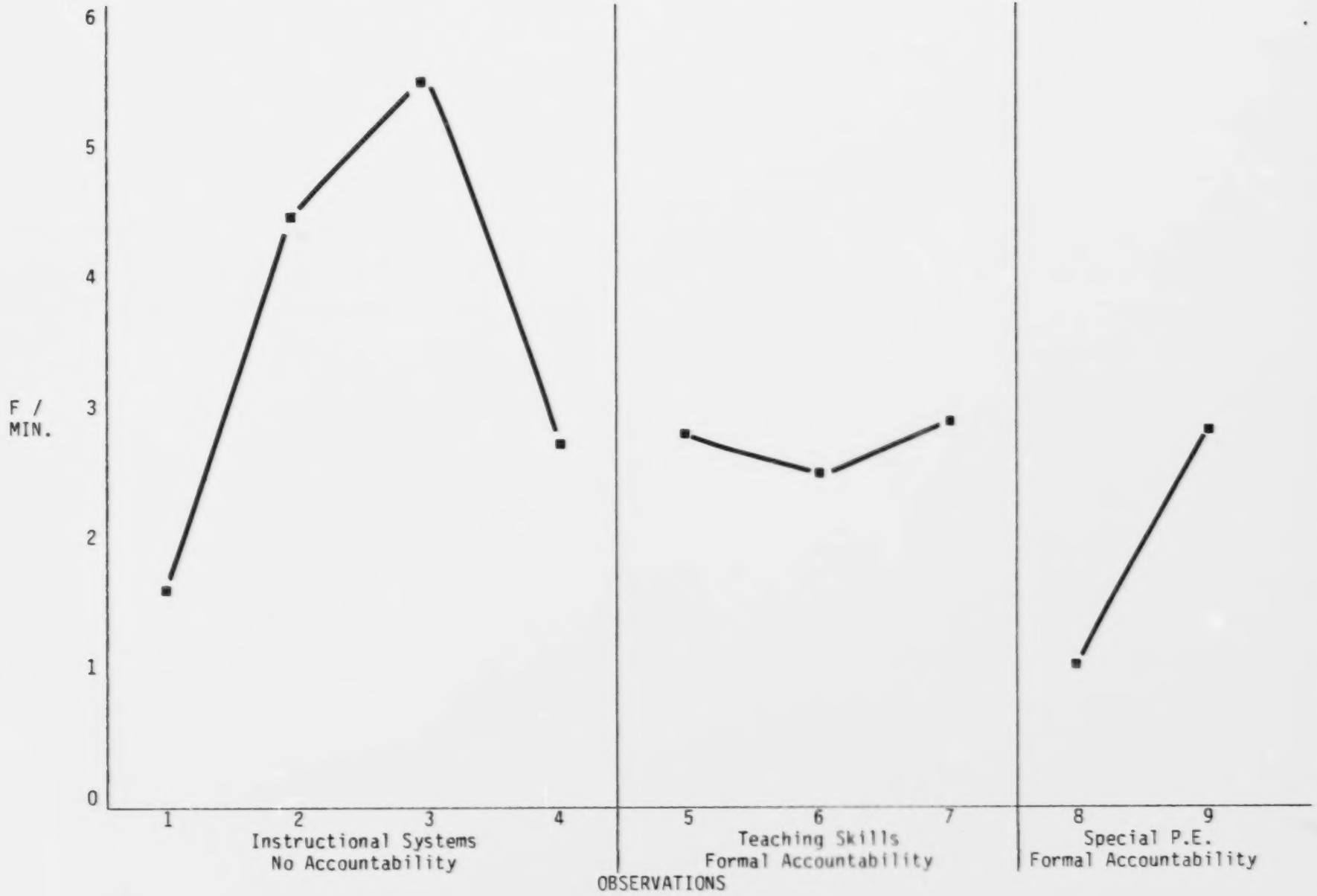

FIGURE 5. Trainee KW. Stability of Feedback (F) as a function of accountability system.

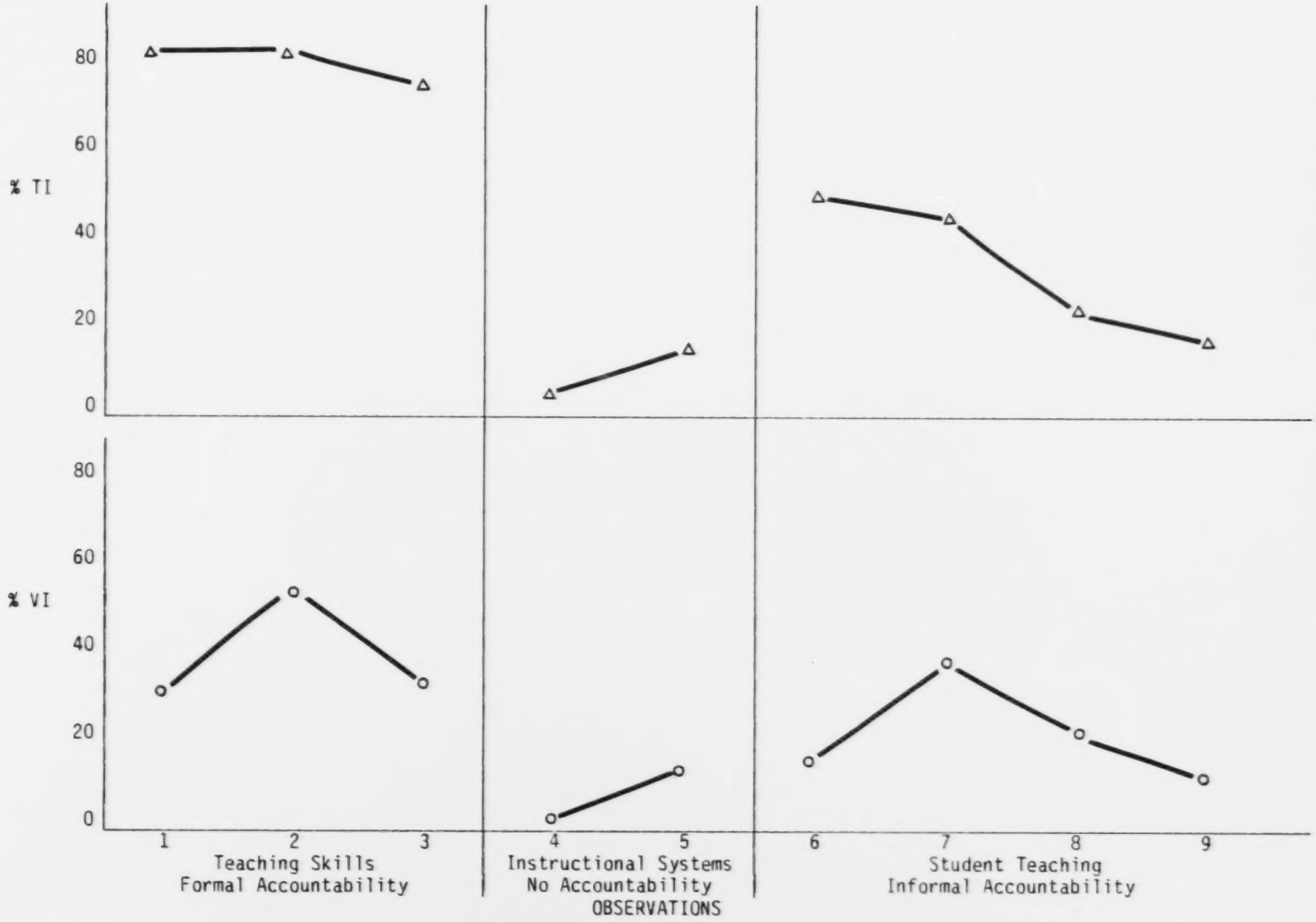

FIGURE 6. Trainee MW. Percent of Total Instruction (TI) and Verbal Instruction (VI) as a function of accountability system with performance decline during Student Teaching.

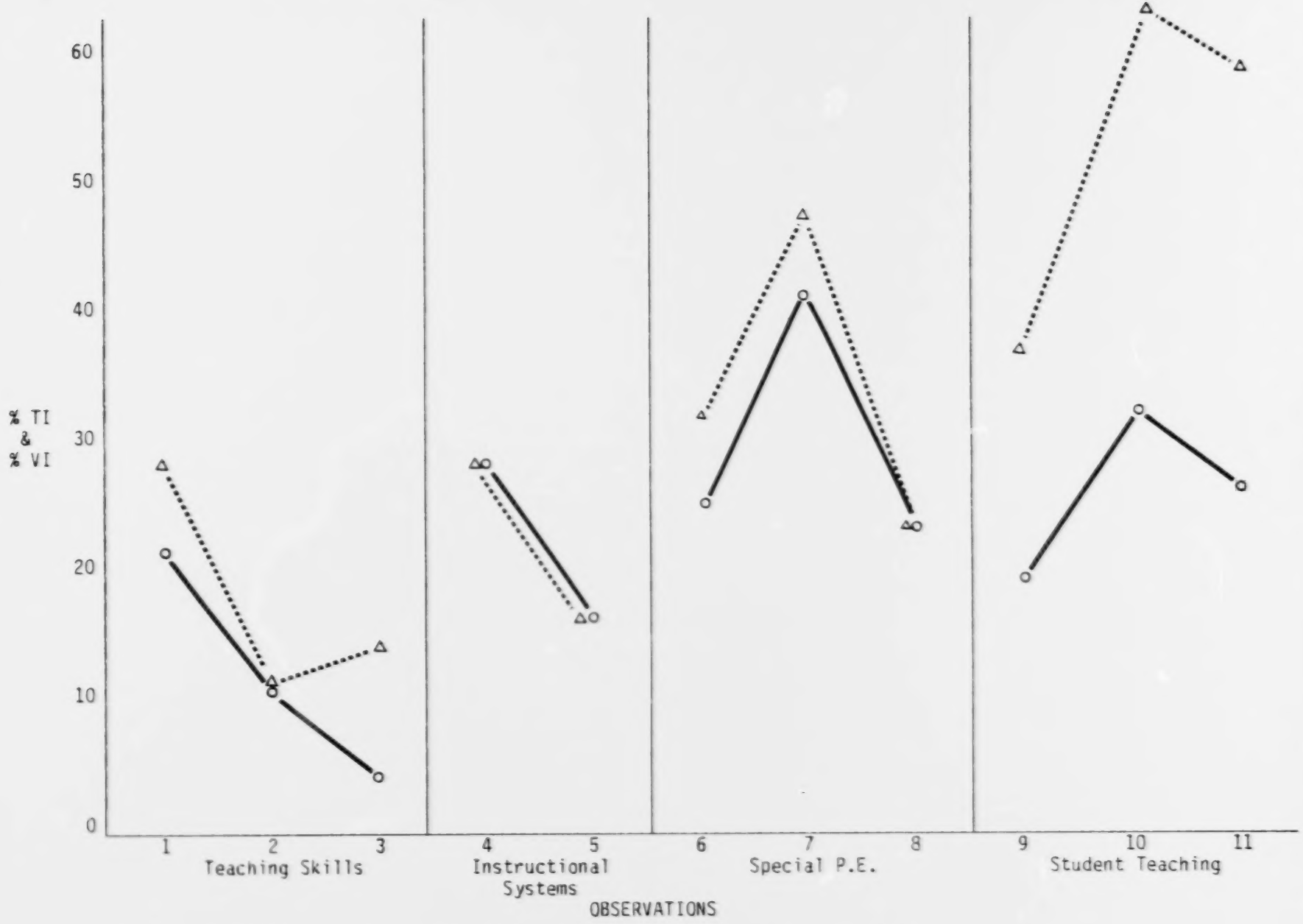

FIGURE 7. Trainee JB. Instructional Pattern differences in Student Teaching.
△·····△ = Total Instruction (TI) ○——○ = Verbal Instruction (VI)

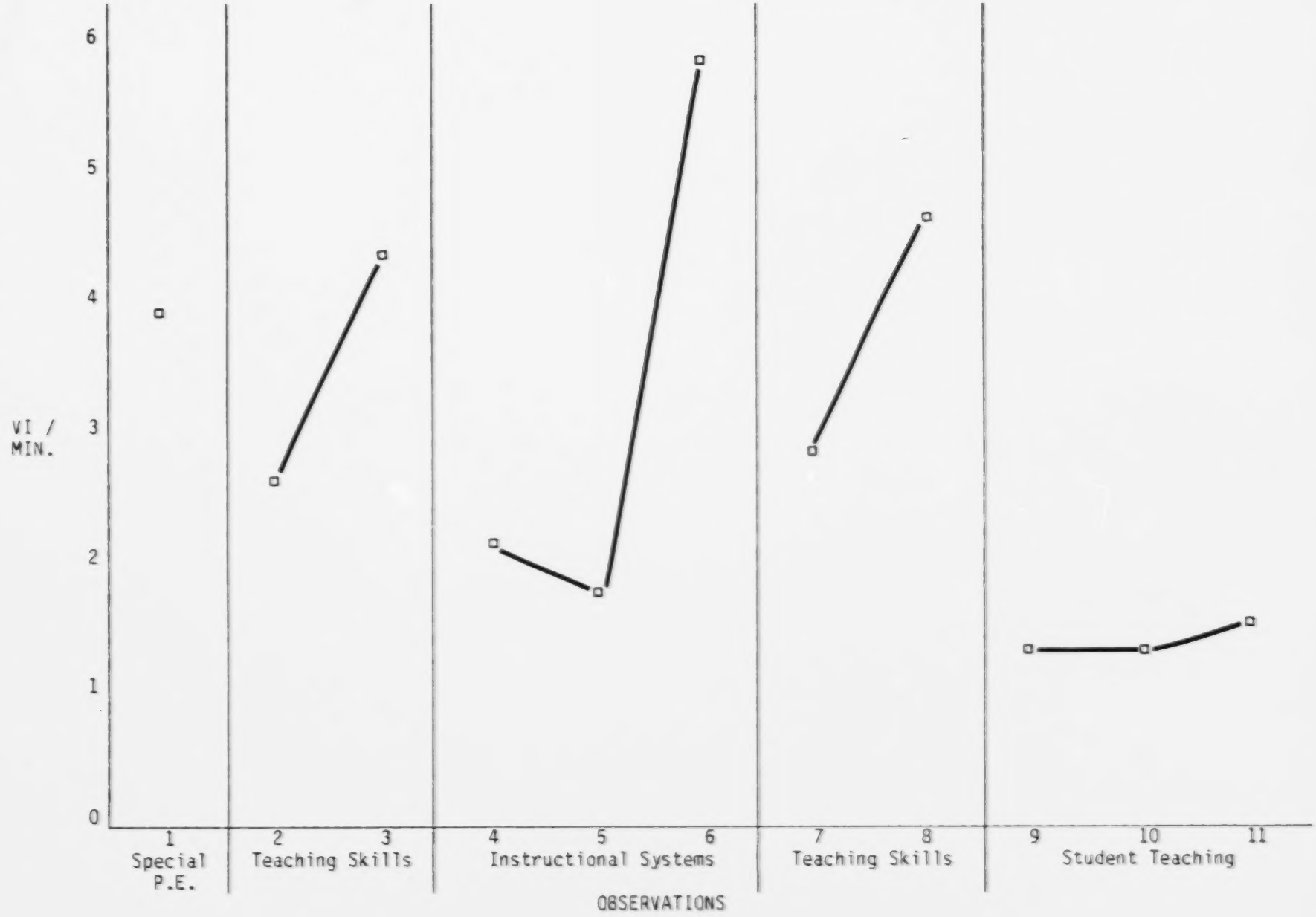

FIGURE 8. Trainee LG. Stability in rate of Verbal Instruction (VI) in Student Teaching.